

Colorectal Cancer Screening

Colorectal cancer is cancer of colon and rectum, which are located in the lower gastrointestinal tract. Together, they are the third most commonly diagnosed cancer and the second leading cause of cancer death in the United States. According to the American Gastroenterological Association, more than 50,000 Americans will die from colorectal cancer in 2001 and approximately 131,600 new cases will be diagnosed. Nearly 25 percent of the US population is considered at risk because of age or other factors. This cancer can occur in both men and women and is most often found among people who are over the age of 50.

Despite a high prevalence, survival rates for colorectal cancer have been improving over the past 30 years. This improvement in the survival rate is a contribution of earlier diagnosis resulting from improved diagnostic techniques. The American Cancer Society recommends a digital rectal exam annually after age 40, a fecal occult blood test annually after age 50, and a proctoscopy (sigmoidoscopy) every 3-5 years after age 50.

BRFSS respondents were asked if they have ever had a blood stool test and digital rectal or proctoscopic exam. Those who answered “yes” were then asked how long it had been since their last exam. Since questions on blood stool test were not asked in 1993 survey, no results on the blood stool test are shown for the 1993-1995 period. The whole survey module for colorectal cancer screening was not included in the survey questionnaire for 2000. Consequently the 2000 period was also omitted for this report.

Ever had a blood stool test (Fecal occult blood test)

In 1999, nearly half (47.1%, 95% CI, 42.07% - 52.12%) of the adult aged 50 or more in Lancaster County, indicated they had a fecal occult blood test for the purpose of colorectal cancer screening. Nearly two-thirds (64.5%) of those who had a test had it within the past two years.

Prevalence and Trend

Respondents who received a fecal occult blood test, increased by 10 percent from the 1996-1998 survey (Fig.97). Thirty-seven percent of respondents in 1996-1998 survey confirmed that they received a blood stool test for colorectal cancer screening. Among those who received the test, 59.3 percent reported that they received the test within the past two years.

Fig.97: Ever Received Blood Stool Test

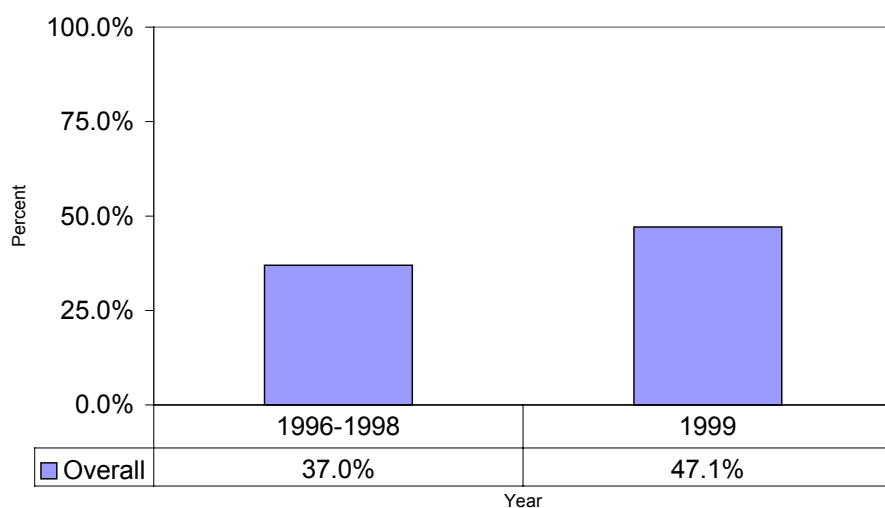
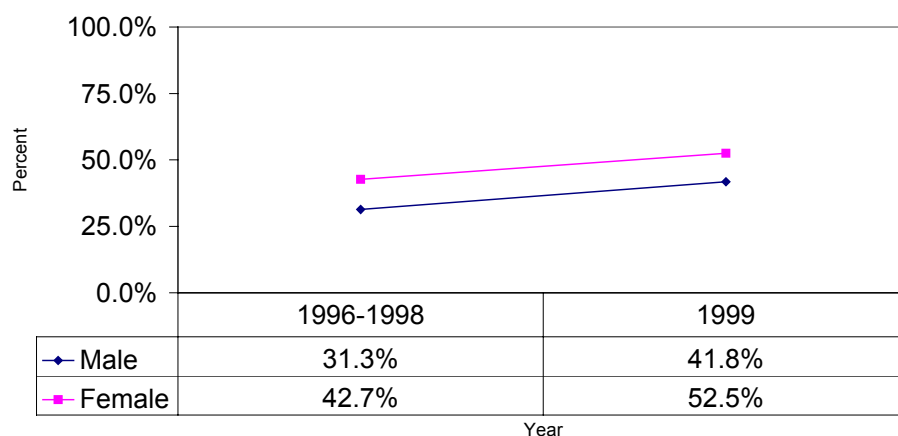
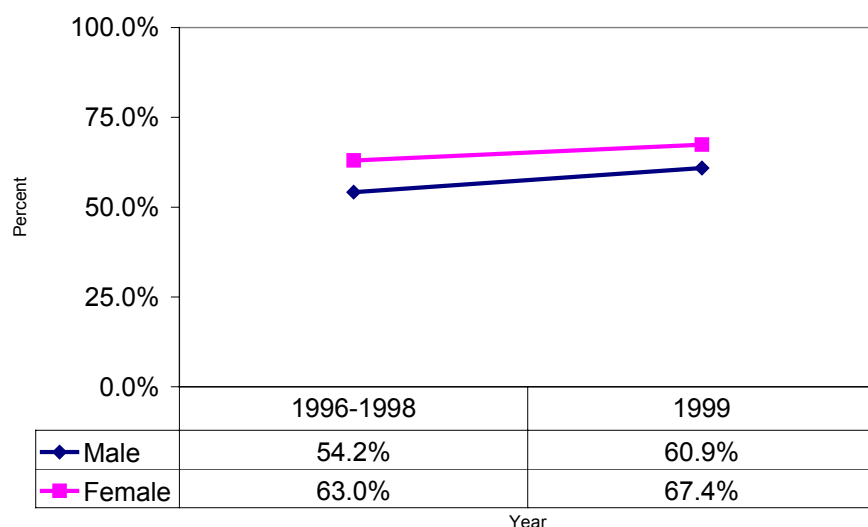


Fig.98a: Ever Received Blood Stool Test by Gender



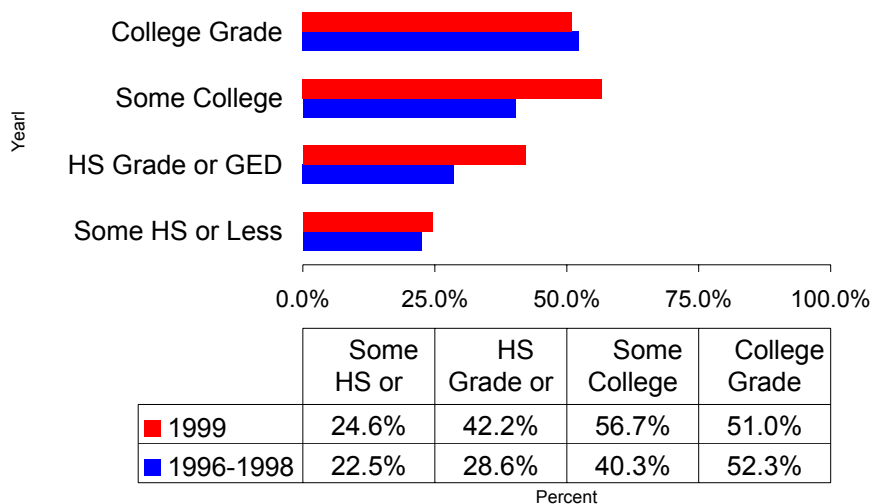
Despite an increase in the prevalence for both men and women since the 1996-1998 period, the proportion of women who had blood stool test outnumbered men by approximately 10 percent both in the 1996-1998 and 1999 surveys. Over fifty percent (52.5%) of women adults aged 50 or more said that they received a blood stool test while 41.8 percent of men adults of the same age reported they receive the test (Fig.98a). Women (67.4%) were also more likely than men (60.9%) to say that they received the test in the past two years (Fig.98b).

Fig.98b: Received a Blood Stool Test in Past Two Years



BRFSS Respondents with higher education attainment appeared to be more cautious about colorectal cancer than respondents with lesser educational attainment. Both 1996-1998 and 1999 survey demonstrated higher educational attainment correlated with a higher proportion of ever receiving a blood stool test (Fig.99a).

Fig.99a: Ever Received a Blood Stool Test by Education



The data for the 1999 survey revealed notable differences across the income levels of the respondents. More than half of the adults (57.3%) with an income of \$ 35,000-\$ 50,000

reported ever receiving an occult blood test as compared to one-third (31.6%) of adults with an income of less than \$10,000 (Fig.99b).

This pattern, however, was not seen in the 1996-1998 survey period. No trends were observed regarding other demographic variables (Table 30).

Fig.99b: Ever Received Blood Stool Test by Income

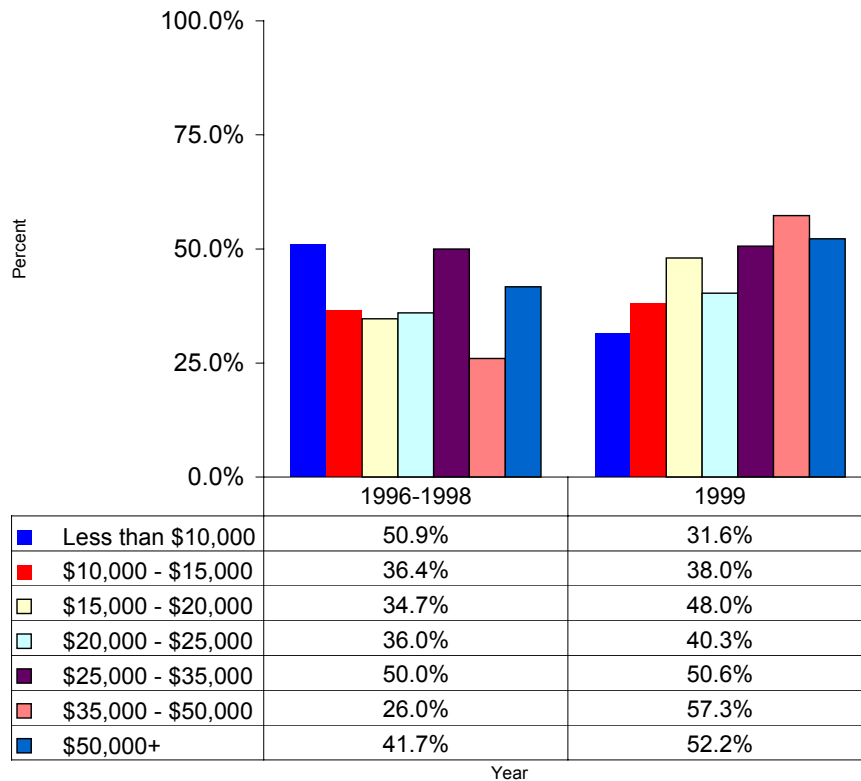


Table 30: Ever Received Blood Stool Test				
Year	1993-1995	1996-1998	1999	2000
Race				
White	N/A	40%	47.8%	N/A
Non-White	N/A	0%	36.2%	N/A
Age Group				
50-59	N/A	21.3%	46.4%	N/A
60-69	N/A	47.4%	51.5%	N/A
70+	N/A	46.7%	44.1%	N/A

Ever Received Sigmoidoscopy

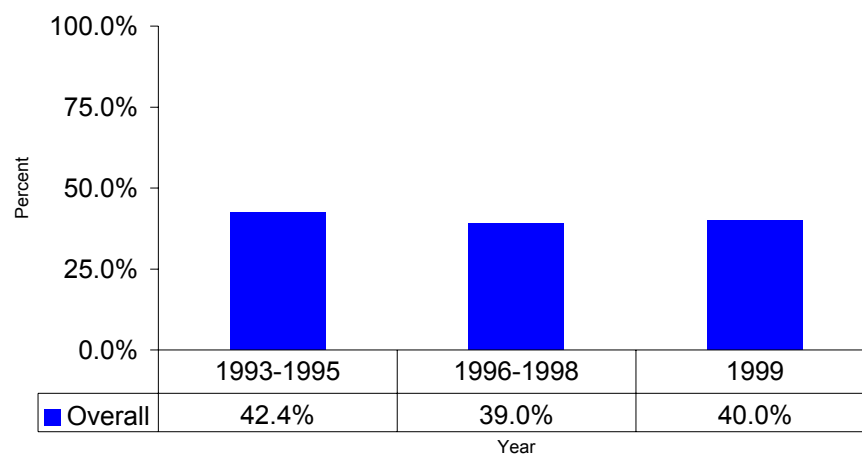
Forty percent (95% CI, 35.1% - 44.9%) of adult aged 50 and older in Lancaster County received their proctoscopy in order to check for cancer and other health problems in

1999. Nearly 64.6 percent of this 40 percent of adults had received the test within the past five years.

Prevalence and Trend

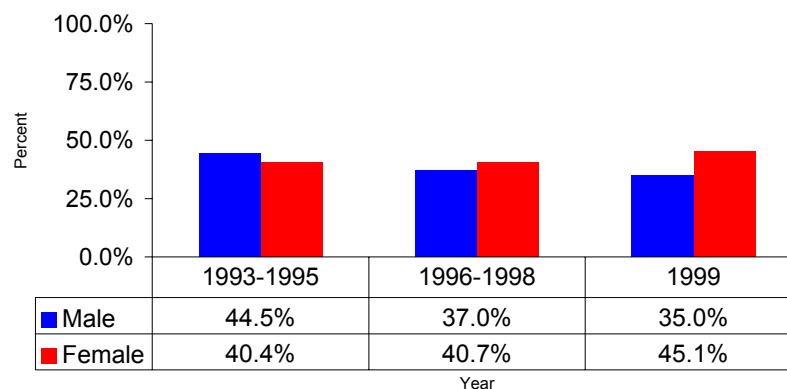
The proportion of respondents who had received a sigmoidoscopy at some time in their lives remained about the same since 1993. The proportion of adults who had this examination was 42.4 percent in the 1993-1995 period and 39 percent in the 1996-1998 period (Fig.100). Of these, 41.3 percent in 1993-1995 and 66.3 percent in 1996-1998 had it within the past five years.

Fig.100: Ever Received a Sigmoidoscopy



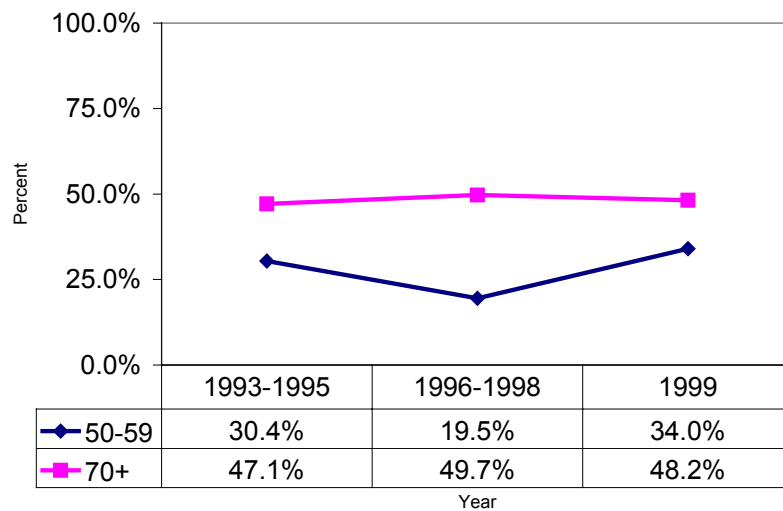
As in the trends for the occult blood test, women were more likely than men to have sigmoidoscopy. Approximately 45 percent of women compared to 35 percent of men reported receiving the test in 1999 to check for cancer and other health problems (Fig.101).

Fig.101: Ever Received a Sigmoidoscopy by Gender



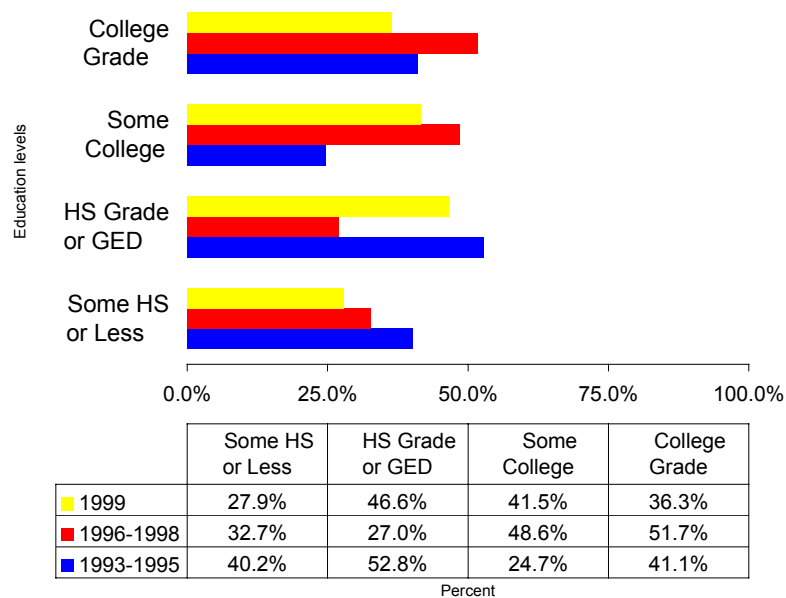
Considerable differences in sigmoidoscopy rates were observed between respondents aged 70 and over and respondents aged 50-59 across the survey years. Approximately 48 percent of adults aged 70 years and older reported to have a sigmoidoscopy compared to 34 percent of adults aged 50-59 years (Fig102).

Fig.102: Ever Had Sigmoidoscopy by Age Group



More college graduate adults received a sigmoidoscopy than adults with “some high school education or less.” In 1999, 36.3 percent of respondents with college diplomas reported receiving a sigmoidoscopy, while 27.9 percent of respondents with “some high school education or less” reported receiving the test (Fig.103).

Fig.103: Ever Received a Sigmoidoscopy by Education



When race was considered, only 22 percent of non-whites compared to 40.8 percent of the white population received a sigmoidoscopy examination. Sigmoidoscopy rates for whites were consistent across the survey years (Table 31). Variations in prevalence of sigmoidoscopy examination due to income differences did not show any particular trend.

Table 31: Ever Had Sigmoidoscopy Examination				
Year	1993-1995	1996-1998	1999	2000
Annual Household Income				
Less than \$10,000	47.3%	50.9%	23.4%	N/A
\$10,000 - \$15,000	33.8%	14%	42.5%	N/A
\$15,000 - \$20,000	36.8%	45.6%	45.1%	N/A
\$20,000 - \$25,000	63.1%	22.7%	44%	N/A
\$25,000 - \$35,000	42.5%	65.7%	41.7%	N/A
\$35,000 - \$50,000	41.8%	32.9%	50.1%	N/A
\$50,000+	40.7%	55.1%	36.1%	N/A
Race				
White	43.1%	40%	40.8%	N/A
Non-White	0%	8.6%	22%	N/A